

6 Magnolia Drive
Acton, MA 01720

October 15, 2008

Philip Giudice, Commissioner
Department of Energy Resources
100 Cambridge Street, Suite 1000
Boston, MA 02114

re: Request for Comments on RPS Class I and Class II Regulations¹

Dear Commissioner Giudice:

On behalf of Boreal Renewable Energy Development (Boreal), a leader in the development of onsite renewable generation projects in Massachusetts I have the following comments in regard to the pending RPS Class I regulations. I am co-founder of and Principal with Boreal (see www.boreal-renewable.com)

Q: “What should the Alternative Compliance Payment (ACP) amount be for Class I, and how should it be calculated?” for Class I renewables.

A: Boreal supports that this base ACP level continues to be set in the same manner it has since inception, \$50/MWh adjusted annually for inflation.

Q: “What should be the minimum percentage of megawatt hour (MWh) sales for on-site generation that is up to 2MW, located within Massachusetts, and began commercial operation after December 31, 2007? What should be the appropriate ACP rate for this technology?” for Class I renewables.

A: For non-solar projects, we urge the DOER to set the requirement for non-solar on-site generation² to start at 0.08% of total sales (or 2.0% of the total RPS requirement) in 2009 to 2.0% of total sales (or 10.0 % of the total RPS requirement) in 2019 (a full proposed schedule is provided in Attachment A). Further the ACP for non-solar on-site generation should be set to 200% of the ACP as compared to off-site generation projects. Boreal proposes the above for the following reasons:

- It is clear the legislature with this language intended to spur native Massachusetts on-site generation projects in order to reasonably maximize the amount of home grown renewables that would benefit Massachusetts based businesses and

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http://www.mass.gov/?pageID=eoeaterminal&L=5&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Renewable+Energy&L3=Renewable+Portfolio+Standard&L4=Green+Communities+Act&sid=Eoea&b=terminalcontent&f=doer_rps_gc_class1_2_regs&csid=Eoea

² that is up to 2MW, located within Massachusetts, and began commercial operation after December 31, 2007. We will just refer to this as on-site generation.



organizations, and ultimately the Massachusetts electricity consumers. Setting the non-solar on-site ACP higher than the base ACP and carving out an increasing amount of the RPS for on-site projects is clearly consistent with the legislature's intent.

- Setting the non-solar on-site ACP to be twice the base ACP would be consistent with the inducement of the native on-site projects.
- Trading in Renewable Energy Certificate markets is many times thin. The sub-market of the on-site generation the market will be dramatically thinner. In order to induce trading, the non-solar on-site ACP must be significantly higher than the base ACP as a hurdle to the transaction costs of such thin markets.
- For solar on-site projects we support the position submitted by Solar Energy Business Association of New England (SEBANE).

I can be reached at (978) 580-6190 if you have any questions.

Sincerely,



Thomas S. Michelman
Principal / Boreal Renewable Energy Development

cc: Robert A. Shatten / Boreal Renewable Energy Development
Paul Gromer / SEBANE



Attachment A – Growth and Impact of Proposed Non-Solar On-Site RPS Carve-Out.

Table 1 shows the assumptions made for the growth and impacts for the non-solar on-site RPS that are displayed in Table 2.

Table-1
Assumptions for the Growth and Impacts of the Non-solar On-site RPS

Assumed Attribute	Value
Total MA Annual MWh	48,000,000
Base ACP (\$/MWh)	\$58.58
Non-Solar ACP Relative to Base ACP	200%
Non-Solar Avg Capacity Factor	40%



Table-2
Assumptions for the Growth and Impacts of the Non-solar On-site RPS

Year	RPS % of total sales	RPS MWh	Non- Solar % of RPS	Non-Solar % of total sales	Non-Solar MWh	Non- Solar needed (MW)	Additional Annual Non- Solar (MW)	Non-Solar ACP (\$/MWh)	Maximum Non- Solar ACP (\$)	Maximum ACP w/out carve out	Maximum ACP w/ carve out	Potential Net ACP increase due to Non- Solar	Net Increase per kWh
2009	4%	1,920,000	2.0%	0.08%	38,400	11	8	117.16	\$4,498,944	\$112,473,600	\$114,723,072	\$2,249,472	\$0.00005
2010	5%	2,400,000	3.0%	0.15%	72,000	21	10	117.16	\$8,435,520	\$140,592,000	\$144,809,760	\$4,217,760	\$0.00009
2011	6%	2,880,000	4.0%	0.24%	115,200	33	12	117.16	\$13,496,832	\$168,710,400	\$175,458,816	\$6,748,416	\$0.00014
2012	7%	3,360,000	5.0%	0.35%	168,000	48	15	117.16	\$19,682,880	\$196,828,800	\$206,670,240	\$9,841,440	\$0.00021
2013	8%	3,840,000	6.0%	0.48%	230,400	66	18	117.16	\$26,993,664	\$224,947,200	\$238,444,032	\$13,496,832	\$0.00028
2014	10%	4,800,000	7.0%	0.70%	336,000	96	30	117.16	\$39,365,760	\$281,184,000	\$300,866,880	\$19,682,880	\$0.00041
2015	12%	5,760,000	8.0%	0.96%	460,800	132	36	117.16	\$53,987,328	\$337,420,800	\$364,414,464	\$26,993,664	\$0.00056
2016	14%	6,720,000	9.0%	1.26%	604,800	173	41	117.16	\$70,858,368	\$393,657,600	\$429,086,784	\$35,429,184	\$0.00074
2017	16%	7,680,000	10.0%	1.60%	768,000	219	47	117.16	\$89,978,880	\$449,894,400	\$494,883,840	\$44,989,440	\$0.00094
2018	18%	8,640,000	10.0%	1.80%	864,000	247	27	117.16	\$101,226,240	\$506,131,200	\$556,744,320	\$50,613,120	\$0.00105
2019	20%	9,600,000	10.0%	2.00%	960,000	274	27	117.16	\$112,473,600	\$562,368,000	\$618,604,800	\$56,236,800	\$0.00117
2020	20%	9,600,000	10.0%	2.00%	960,000	274	0	117.16	\$112,473,600	\$562,368,000	\$618,604,800	\$56,236,800	\$0.00117
2021	20%	9,600,000	10.0%	2.00%	960,000	274	0	117.16	\$112,473,600	\$562,368,000	\$618,604,800	\$56,236,800	\$0.00117
2022	20%	9,600,000	10.0%	2.00%	960,000	274	0	117.16	\$112,473,600	\$562,368,000	\$618,604,800	\$56,236,800	\$0.00117
2023	20%	9,600,000	10.0%	2.00%	960,000	274	0	117.16	\$112,473,600	\$562,368,000	\$618,604,800	\$56,236,800	\$0.00117

